CUMBERLAND COUNTY COUNCIL.



# ANNUAL REPORT

OF THE

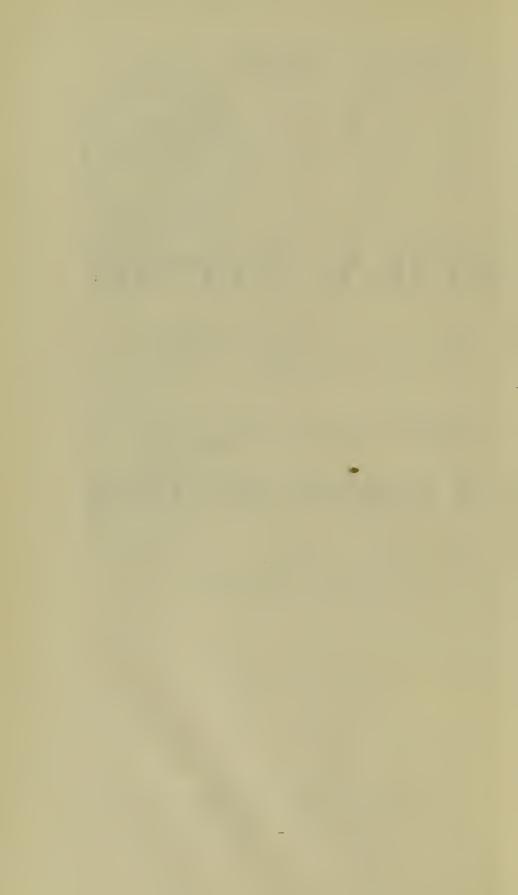
MEDICAL OFFICER OF HEALTH,

# F. H. MORISON, M.D., D.P.H.

FOR THE YEAR 1924.

CARLISLE:

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#### CUMBERLAND COUNTY COUNCIL.

TO THE CUMBERLAND COUNTY COUNCIL.

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I have pleasure in presenting this, my Seventeenth Annual Report, viz., that for the year 1924, on the Health of the Administrative County.

The most satisfactory feature of the vital statistics is the fact that the infant mortality rate is again lower than in the previous year by 2 per 1,000 births.

#### Summary of Vital Statistics.

					Infa	$\operatorname{int}$	
	Birth	Birth-rate.		-rate.	Mortality.		
	1924.	1923.	1924.	1923.	1924.	1923.	
Urban Districts	21.2	22.3	13.4	13.5 .	81	78	
Rural Districts	19.2	19.5	12.5	11.9 .	61	68	
Administrative							
County	20.3	21.1	13.0	12.7.	72	74	
England & Wales.	18.8	19.7	12.2	11.6.	75	69	

#### Area.

The Area of the Administrative County as given in the Census Returns for 1921 is 968,598 acres—Municipal and Urban Districts, 62,133 acres; Rural Districts, 906,465 acres.

### Population.

The population as given by the Registrar-General for the year 1924:—

Urban Districts		 	123,000
Rural Districts		 	98,010
Administrative C	ountv	 	221,010

#### Births.

The Births registered in the County during the year 1924 numbered 4,496 (2,265 males and 2,231 females), giving a birth-rate of 20.3 per 1,000 of population, compared with 4,647 (2385 males and 2,262 females) and a rate of 21.1 the previous year.

In the Urban Districts there were 2,614 births (1,305 males and 1,309 females), giving a rate of 21.2; and in the Rural Districts 1,882 (960 males and 922 females), giving a rate of 19.2 per 1,000 of population.

The corresponding figures for the previous year were: —Urban Districts, 2,745, and a rate of 22.3; Rural Districts, 1,902, and a rate of 19.5.

The birth-rate of England and Wales for the year was 18.8.

Arranged in the order of their birth-rates the Urban and Rural Districts stand thus:—

Urban.	Rural.
Maryport 26.2 (20	0.7) Cockermouth. 21.5 (21.6)
Whitehaven . 25.0 (28	8.1) Brampton 19.6 (16.0)
Arlecdon and	Wigton 19.5 (22.6)
Frizington. $24.7$ (2)	1.3) Whitehaven . 19.3 (22.0)
Penrith 22.6 (23	3.7) Penrith 18.7 (17.4)
Cleator Moor. 20.3 (19	9.7) Carlisle 18.2 (17.2)
Harrington 20.3 (2)	3.6) Longtown 17.9 (19.3)
Aspatria 20.2 (2)	2.4) Alston 16.1 (17.5)
Workington . 19.9 (2)	2.5) Bootle 14.2 (14.8)
Egremont 19.3 (2)	3.2)
Cockermouth. 18.6 (1	
Millom 17.7 (18	8.8)
Wigton 17.5 (2	(3.2)
Keswick 17.5 (18	(5.9)
Holme	
Cultram 16.1 (1	8.8)

Note.—In all these tables the figures in brackets are those of the previous year.

# Illegitimate Births.

The number of illegitimate births was 255, so that 56 per 1.000 of the total births were illegitimate, compared with 247 and 53 the previous year.

The rates of illegitimate births per 1,000 of the total births in the various Sanitary Districts are as follows:—

Urban.		Rural.
Arlecdon and		Alston 45 (104)
Frizington 54	(4.1)	Bootle 69 (33)
Aspatria 81	(36)	Brampton 94 (54)
Cleator Moor 41	(47)	Carlisle 64 (68)
Cockermouth 44	(72)	Cockermouth 46 (80)
Egremont 43	(36)	Longtown 85 (40)
Harrington 75	(46)	Penrith100 (61)
Holme Cultram 38	(44)	Whitehaven 37 (42)
Keswick 81	(88)	Wigton 66 (46)
Maryport 64	(34)	,
Millom 32	(60)	
Penrith101	(77)	
Whitehaven 39	(44)	
Wigton 45	(79)	
Workington 44		

In the Urban Districts 52 and in the Rural Districts 63 per 1,000 births were illegitimate.

#### Deaths.

The number of deaths registered was 2,875 (1,500 males and 1,375 females); this gives a death-rate of 13.0 per 1,000, compared with 2,793 (1,444 males and 1,349 females), and a rate of 12.7 per 1,000 the previous year.

The death-rate in England and Wales was 12.2. In the Urban Districts there were 1,649 deaths (871 males and 778 females), giving a rate of 13.4; in the Rural Districts 1,226 (629 males and 597 females), giving a rate of 12.5. The corresponding figures for the previous year were:—Urban Districts, 1,654, and a rate of 13.5; Rural Districts, 1,139, and a rate of 11.9.

Arranged in the order of their death-rates the Urban and Rural Districts stand thus:—

Urban.	Rural.
Arlecdon and	Brampton 15.3 (11.2)
Frizington. 17.3 (14.5)	Penrith 13.8 (10.9)
Wigton 15.6 (16.2)	Alston 13.5 (12.7)
Aspatria 15.5 (9.3)	Bootle 13.3 (10.6)
Penrith 15.3 (14.4)	Wigton 12.9 (14.4)
Whitehaven . 14.8 (15.1)	Cockermouth. 12.7 (12.6)
Keswick 13.7 (13.8)	Longtown 12.1 \(\)(9.5)
Cockermouth. 13.5 (17.2)	Carlisle 12.0 (11.0)
Maryport 13.1 (12.8)	Whitehaven . 9.2 (10.9)
Millom 13.0 (13.5)	` '
Egremont 12.8 (12.7)	
Workington . 12.2 (12.5)	
Cleator Moor. 11.3 (12.8)	
Holme	
Cultram 11.3 (11.1)	
Harrington 9.8 (12.3)	

The slight increase in the death-rate is accounted for by the increased number of deaths from Influenza and Respiratory Diseases.

It is interesting to note the age periods at which the deaths occurred, and to contrast those in the Urban with those in the Rural Districts:—

	Und	ler					Over
Ages.	1	1-2	2-5	5-15 15-25	25-45 45-	65 65-75	75
							17.1 per cent.
Rural	9.2	2.8	2.2	1.8 - 3.8	7.9 - 22	4 23.7	25.8

It will be noted that whilst in Rural Districts half the total deaths occurred above the age of 65, in Urban Districts only 37% were above that age.

## Infant Mortality.

4,496 births were registered, and 327 infants died before they reached the age of one year; the Infant Mortality rate, therefore, was at the rate of 72 per 1,000 births, 2 per 1,000 lower than last year.

The Infant Mortality in England and Wales was 75.

In the Urban Districts there were 2,614 births and 212 deaths of infants. The Infant Mortality was, therefore, 81 per 1,000 births, 3 per 1,000 higher than the previous year.

In the Rural Districts there were 1,882 births and 115 deaths of infants, giving an Infant Mortality rate of 61 per 1,000 births, 7 per 1,000 lower than last year.

The Infant Mortality rate of legitimate infants was 71; that of illegitimate infants was 90.

Although the illegitimate birth-rate continues to be higher than the average throughout England, it speaks well for the unmarried mothers that the death-rate of their infants remained so low. As a general rule the infant mortality of illegitimate infants is nearly double that of legitimate infants.

Arranged in order of their Infant Mortality rates the Urban and Rural Districts stand thus:—

Urban.		Rural.		
Cockermouth131	(132)	Bootle	81	(78)
Cleator Moor122	(54)	Cockermouth	76	(96)
Millon117	(85)	Brampton		2
Arlecdon and	,	Carlisle		
Frizington100	(97)	Penrith		(33)
Egremont100 (		Whitehaven	47	(53)
Maryport 82		Alston		(62)
Workington 80		Wigton		
Harrington 75		Longtown		
Whitehaven 73				, ,
Wigton 61 (				
Aspatria 54	(83)			
Holme Cultram. 38	(56)			
Penrith 37	(3ช)์			
Keswick 27	(15)			

Whilst it is gratifying to note that the Infant Mortality has decreased to 72 per 1.000 births throughout the County, it will be noted that in five of the Urban Districts the Infant Mortality still remains at or over 100.

It is disquieting, because these are the areas in which unemployment has been and is most prevalent, and in spite of all that has been done under the Maternity and Child Welfare Act, one cannot help but feel anxious as to the condition of health in these areas, not only the health of children, but of many of the adults as well.

Of the total infant deaths, 29% died before they were one week old. 35% over one week but under three months. Thus of the total number of infants who died, two-thirds

died before they reached the age of three months, indicating that some cause or causes must be at work before the babies are born.

As to the actual causes of death:—

8%

7% were due to Whooping Cough.
5%,,,,,,,Diarrhea.
23%,,,,,,,,Respiratory Diseases.
32%,,,,,,,Premature Birth, Congenital
Debility, &c.

Convulsions.

#### Cancer.

273 deaths were registered as due to Cancer, a rate of 1.2 per 1,000 of population, as compared with 276 deaths and a rate of 1.2 the previous year.

Arranged in order of their death-rates from Cancer the Urban and Rural Districts stand thus:—

Urban.	Rural.
Holme Cultram 2.2 (1.5)	Bootle 1.6 (1.1)
Aspatria 2.1 (1.1)	Brampton 1.4 (1.1)
Penrith 1.8 (1.9)	Wigton 1.4 (1.0)
Wigton 1.8 (2.1)	Carlisle 1.2 (1.2)
Egremont 1.4 (0.8)	Cockermouth 1.2 (1.5)
Arlecdon and	Penrith 1.2 (1.3)
Frizington 1.3 (0.9)	Alston 1.1 (1.5)
Whitehaven 1.3 (0.8)	Longtown 0.8 (0.6)
Workington 1.3 (1.6)	Whitehaveu 0.9 (0.7)
Maryport 1.1 (1.3)	· /
Keswick 0.9 (1.6)	
Cockermouth 0.8 (0.8)	
Millom 0.8 (1.8)	
Cleator Moor 0.4 (0.7)	
Harrington 0.4 (2.4)	

## Zymotic Diseases.

The diseases usually included in this category are:— Enteric Fever, Measles, Smallpox, Scarlet Fever, Whooping Cough, Diphtheria, and Diarrhœa.

92 deaths were registered from these diseases, compared with 107 the previous year. This gives a rate of 0.4 compared with 0.5 in 1923.

Of these 92 deaths Enteric Fever was responsible for 2, Measles 7, Scarlet Fever 6, Whooping Cough 46, Diphtheria 9, and Diarrhœa 22.

Arvanged in the order of their death-rates from Zymotic Diseases the Urban and Rural Districts stand thus:—

Urban.	Ruval.
Aspatria 1.1 (0.2)	Wigton 1.3 (0.4)
Wigton 1.1 (1.1)	Cockermouth $\dots 0.2 (0.6)$
Millom 1.0 (0.2)	Penrith $\dots 0.2 (0.2)$
Maryport 0.9 (1.3)	Bootle 0.1 (0.5)
Whitehaven $0.7 (0.2)$	Brampton $\dots$ 0.1 $(0.1)$
Workington 0.5 (0.8)	Carlisle 0.1 (0.5)
Arlecdon and	Longtown 0.1 (0.6)
Frizington 0.2 (0.2)	Whitehaven Nil (0.1)
Egremont $\dots$ 0.2 $(0.5)$	Alston Nil (Nil)
Holme Cultram 0.2 (Nil)	
Keswick 0.2 (0.2)	
Cockermouth 0.1 (1.6)	
Penrith 0.1 (0.2)	
Cleator Moor Nil (0.4)	
Harrington Nil (0.2)	

# Smallpox.

During the year 186 cases of Smallpox were notified.

In Maryport 6 cases, Whitehaven Borough 7 cases. Workington Borough 105 cases, Alston Rural District 1 case, and Cockermouth Rural District 67 cases.

The first case was discovered in the Cockermouth Rural District on March 4th. Careful enquiry was made, but it was impossible to trace the source of infection, as evidence was obtained that mild cases had been occurring for some time previous to the first case being recognised.

Speaking generally, the disease was a mild type, but some of the cases were fairly severe, although no cases so severe as one was accustomed to see in former epidemics occurred.

There were no deaths.

In this outbreak one fact stands out very prominently: No one who had been recently vaccinated took the disease.

The outbreak whilst it lasted gave rise to great anxiety, because such a large proportion of the population is unprotected by vaccination.

It is true that a fairly large number of vaccinations were performed, but nevertheless a large section of the community still remains unprotected, and therefore susceptible to infection.

The thanks of the community is due to the Health Departments of the districts involved; it is entirely due to the indefatigable work done by each member that the epidemic was stopped so quickly.

Smallpox of this mild type has been more or less prevalent in many districts in the Country for the past two or three years, and there are indications at the present time that the type of disease is becoming much more virulent.

We in this County are not safe from a virulent outbreak even now, because so many people still refuse, in spite of all warnings, to protect themselves and their children by means of the only sure preventive measure—Vaccination.

Experience is accumulating that after a time—sometimes longer, sometimes shorter—the infection, mild at first, is apt to become more virulent.

This has proved to be the case in America, and there are indications at the present time that the disease is becoming more virulent in England.

For years now warnings have been issued from time to time that sooner or later we would get Smallpox in this County should the majority of the population still remain unvaccinated. The warnings have fallen on deaf ears, possibly because they have been uttered too mildly, possibly because reminders of what occurred years ago are apt to be forgotten or disregarded, or possibly the horrors of a bad type of smallpox are too horrible to describe.

At the present time I consider the outlook is really a serious one. I, therefore, publish, in the hope that it may do some good, parts of an official report of an Epidemic of Virulent Smallpox in Canada. Be it noted that the mild type was prevalent in Canada before this outbreak.

The account of the outbreak is taken from a report by Dr. F. Adams, Medical Officer of Health for the Essex Border Municipalities.

After dealing with the origin of the epidemic and various technical matters, Dr. Adams goes on to give in detail the "Measures adopted to control the epidemic."

" Measures Adopted to Control the Epidemic.

When the epidemic first broke out there was a period of two or three days in which we were not certain that we were really dealing with an outbreak of smallpox. cases were irregular, and it was only after we had seen two or three typical cases that we were sure what we were dealing with. While certain preliminary steps had been taken two or three days before, it was on Saturday night, 23rd February, that the Board of Health met to determine what measures should be taken to check the epidemic. By that time we knew that the disease we were dealing with was Smallpox, that the community was seeded with cases, and that it was an exceedingly virulent and irregular form of the disease. The local Board of Health for the Essex Border Municipalities has a distinctly unusual composition. The Board has jurisdiction over six municipalities, and every member of the Board is a doctor who has at some time been a medical officer of health himself. The measures decided upon by the Board were as follows:—Provision was made for the care of the sick and the maintenance and medical supervision of families in quarantine, but the most vital decision of the Board was in respect of vaccination. The Board was a unit in the opinion that the one thing that would stop the epidemic was vaccination of the whole population. population is about 70,000 persons, and the problem before the Board was to get that population vaccinated in the shortest possible period of time. The procedure decided on was as follows: -Then and there three of our nurses using three 'phone lines called up every doctor in the Border cities that could be reached, and asked him if in the emergency he would consent to vaccinate any person who came to his office free of charge, it being understood that the Board of Health would supply vaccine and pay for vaccinations at the rate of 25 cents apiece. Within half an hour we had the consent of about threequarters of our doctors. The rest could not be reached,

but we assumed their consent and telephoned them Sunday Before midnight a statement of the situation was prepared and sent out to every clergyman in the Border cities, with a request that it be read from the pulpit at every service on Sunday. The gist of the announcement was that an epidemic of exceedingly severe smallpox was present in the Border cities, that there had already been a number of deaths, and that everyone was advised to be vaccinated at once and to have all the members of his household vaccinated; finally that arrangements had been made with every doctor in the Border cities under which he would vaccinate everyone who came to his office free of charge. On Sunday, at our request, the Secretary of the Chamber of Commerce called up every large employer of labour in the Border cities, explained the situation to him, and asked him to urge vaccination upon all his employees on Monday morning. Monday afternoon a full-page advertisement of the Board of Health, setting forth the situation, appeared in the local paper.

The effect of these measures was all that we could have asked for. There are some 70 doctors in the Border cities, and we had simply created 70 free vaccination The doctors' offices began to be crowded with applicants for vaccination on Sunday morning, and within the next six days we estimated that well over 95 per cent. of our population was vaccinated. There was nothing compulsory about any of our methods. We simply took the public into our confidence, told them the situation as it really was, advised general vaccination, and made provision for it without charge. The antivaccinationist, usually so noisy and troublesome, gave us no trouble at all. So far as checking the epidemic was concerned, the effect of these measures was 100 per cent. perfect. We had one big splash of cases and then silence, and that silence has continued without interruption right up to the present moment—almost three months.

#### VACCINATION.

The total figures for the whole epidemic covering the

Border cities, Amherstburg, Maidstone, and Detroit are as follows:—

Never successfully vaccinated	45		Mortality. 71%
Vaccinated successfully 12 to 65 years before  Vaccinated successfully in incubation period, i.e., came down ill	10	 0	 0% .
with smallpox and a taking vaccination	12	 0	 0%
Totals	67	 32	 48%

You will note that no person who had ever been vaccinated successfully at any time in his or her life, whether it was in the incubation period of smallpox or years and years before, died of smallpox. You will note also that of the persons who had never been successfully vaccinated and who developed smallpox 71 per cent, died of the disease. That is a wonderful story in regard to the efficacy of vaccination as mitigating the severity of the disease, but the figures by no means tell the whole story. A few persons who had never been successfully vaccinated recovered, but they all had severe attacks and had a terrible fight for their lives.

On the other hand, persons who had been previously vaccinated successfully, no matter how long before, had mild attacks. Incidentally, it should be mentioned that no one vaccinated successfully within 12 years took small-pox at all. But the real marvels of vaccination can, in my opinion, be appreciated only by personal experience in an epidemic such as we went through in the Border cities. I feel that I might very well close this paper by telling you of some of our actual experiences.

In Windsor there is a family named M——, consisting of ten persons. All of them were exposed to small-pox and about equally. Nine of them had been vaccinated successfully in previous years, and none of these contracted smallpox. The tenth person had never been vaccinated, contracted the disease, and died inside of four days of the hemorrhagic lobster rash type of smallpox.

During the epidemic we had to employ a large number of nurses to look after the sick, and we had also to expose to the disease orderlies, ambulance drivers, clergymen, and others. We made it an absolute rule that no one should be exposed to smallpox through our action unless that person had a vaccination scar already and was also freshly vaccinated by us. The result of this precaution was that not a single person who was exposed to the disease through any action on our part came down with smallpox.

Of course, when a case of smallpox developed in a household we vaccinated every other person in the house. Contacts of this kind which in Maidstone, Amherstburg, and the Border cities run into the hundreds, all, so far as I know, escaped smallpox as a consequence of timely vaccination.

In Windsor a certain Mrs. Mc.L., 62 years of age, never vaccinated, developed smallpox, and died of it. Her husband, 72 years of age, vaccinated successfully 62 years ago, had a trifling attack of the disease.

Mrs. J. D., of Walkerville, 52 years of age, never vaccinated, developed smallpox and died after an illness of eight days. Her husband, with a history of exposure many times in excess of that of his wife, had a trifling attack of smallpox. He had been successfully vaccinated 12 years ago.

The proprietor of a laundry came down sick with smallpox, and on investigation it was found that out of a total staff of 25 persons at the laundry he alone was unvaccinated, and he was the only one who had contracted the disease.

- A. D., age 50, and his son, aged 25, neither having been successfully vaccinated, died of smallpox. Mrs. A. D., vaccinated successfully 32 years before, took smallpox also, but it was a trifling illness.
- Mrs. B., of Windsor, came down with a mild attack of smallpox. She is 58 years old. When she was eight years old she went into a convent for three years, and in the first of those years she was vaccinated successfully. As a result of that vaccination 50 years ago her attack of smallpox was a negligible affair. The scar on her arm is so faint that it can be recognised only by eareful search in a good light.
- G. D., the man who had the original illness that was smallpox, but was not diagnosed as such, had a daughter Josephine, 12 years old. She was exposed to her father

through the whole course of sickness, and later on to her mother and aunt, who developed smallpox, but she has not had one single day's illness herself. Six years ago she was vaccinated to go to school, and she has on her left arm a scar about the size of an old-fashioned Canadian five-cent piece. Twenty-one close relatives of this little girl, all unvaccinated, are dead of smallpox.

It is when one has had close personal experience with incidents such as these, when one has had to send nurses by the dozen up against the most virulent smallpox with nothing to protect them except vaccination, and they nurse the disease week in and week out without contracting it, when one has seen a community of thousands of persons threatened with decimation by smallpox, and one has seen wholesale vaccination pull the disease up short and weeks and weeks go by without any fresh cases at all, then and then only does one fully appreciate the marvellous gift which Jenner made to science and to humanity.

LESSONS TO BE LEARNED FROM THE EPIDEMIC.

- 1. Exceedingly virulent smallpox is present in the province.
- 2. Irregular forms of the disease presenting great difficulties in diagnosis are apt to occur.
- 3. The disease may be transmitted through unusual channels and quarantine of cases, and all contacts should be very rigid.
- 4. Vaccination is the one sure weapon against the disease. In this epidemic—
  - (a) No one vaccinated successfully within 12 years contracted smallpox.
  - (b) No one ever vaccinated successfully, no matter how long ago, died of smallpox.
  - (c) Of the smallpox cases in persons who had never been successfully vaccinated, 71 per cent. died.
  - (d) Vaccination of almost the whole population stopped the epidemic abruptly and completely."

Scarlet Fever.

438 cases were notified (227 in Urban and 211 in Rural Districts), with 6 deaths (3 in Urban and 3 in Rural Districts).

In 1923 there were 445 cases notified, with 9 deaths.

Cases occurred in every sanitary district, and were most prevalent in Maryport, Penrith, Whitehaven, and Workington of the Urban Districts, and in Brampton and Cockermouth of the Rural Districts.

# Diphtheria.

144 cases were notified (76 in Urban and 68 in Rural Districts). There were 9 deaths (4 in Urban and 5 in Rural districts).

Arrangements were made in all sanitary districts by which Medical Practitioners may obtain Antitoxin—with the exceptions of Alston and Brampton.

#### Enteric Fever.

26 cases were notified—1 in Harrington, 2 in Keswick, 4 in Whitehaven, 3 in Workington, 1 in Alston, 2 Carlisle R. D., 4 in Cockermouth R. D., 1 Longtown, 7 in Penrith R. D., and 1 in Whitehaven R. D.

There were 2 deaths—1 in Workington and 1 in Cockermouth Rural District.

# Puerperal Fever.

10 cases were notified, 6 in Urban and 4 in Rural Districts. There were 8 deaths—4 in Urban and 4 in Rural Districts.

#### Measles.

7 deaths were registered as due to Measles, against 50 the previous year. All the deaths were of children under 5.

# Whooping Cough.

46 deaths were due to Whooping Cough, against 13 the previous year.

29 of these were in Urban and 17 in Rural Districts.

#### Diarrhœa.

22 deaths occurred under two years of age, against 46 the previous year; 17 of these were children under one year of age.

Erysipelas.

38 cases were notified, compared with 42 the previous year.

#### Influenza.

120 deaths were registered, against 41 the previous year.

Deaths from Influenza were recorded in all the sanitary areas with the exception of Harrington and Maryport:

Respiratory Diseases.

From these diseases—chiefly Bronchitis and Pneumonia—there were 434 deaths, compared with 379 the previous year.

In the Urban districts the death-rate from these diseases was 2.1, against 1.9 the previous year; and in the Rural Districts 1.7, against 1.5 the previous year.

The death-rate in the Administrative County from these diseases was 1.9, against 1.7 the previous year.

Arranged in the order of their death-rates from Respiratory Diseases the Urban and Rural Districts stand thus:—

Urban.		Rural.	
Cockermouth 3.6	(2.9)	Cockermouth 2.6 (2.1	1)
Arlecdon and	,	Brampton 2.3 (0.8	_ /
Frizington 3.4	(2.4)	Longtown 1.9 (1.1	
Maryport 2.9	(1.7)	Alston 1.8 (0.7)	
Whitehaven 2.8		Whitehaven 1.7 (1.8	
Wigton 2.3		Bootle 1.6 (1.3	
Egremont 2.2		Penrith 1.0 (1.1	
Millom 2.0		Carlisle 0.9 (1.2	
Cleator Moor 1.7		Wigton 0.9 (1.6	
Penrith 1.7	(0.1)	· ·	,
Keswick 1.6	(1.4)		
Workington 1.6	(1.7)		
Harrington 1.5			
Aspatria 1.1			
Holme Cultram. 0.6			
	• /		

# Water Supply.

Both the Carlisle and Wigton Rural District Councils are now taking steps to supply their districts with water. Some of the Parishes in both districts have already been supplied. A scheme for the supply of the Longtown Rural District has also been under consideration, In Millom Urban District, the present supply having been found to be polluted, a new supply was considered. The matter is, I understand, still under consideration. The Penrith Urban District have a scheme in hand to improve their present supply.

#### Rivers and Streams.

No complaints of pollution have been received. Many minor sources of pollution of the rivers are still in evidence.

# Drainage and Sewerage.

Several schemes are either under consideration or are in progress. In this connection the help given by the Unemployment Grants Committee has been invaluable in enabling small Authorities to carry out important and necessary schemes.

# Sale of Food and Drugs Acts.

The following is a copy of the Annual Report of the County Analyst:—

THE COUNTY COUNCIL OF CUMBERLAND.

Gentlemen,

SALE OF FOOD AND DRUGS ACTS.

We regret that owing to the death of Dr. Robert Hellon in November last it has become our duty to report to you the results of the working of the Food and Drugs Acts in the County of Cumberland during the year ended December 30th, 1924.

The total number of samples analysed was 313. All were taken by Police Officers acting as Food Inspectors. Eleven were found to be adulterated. This is equivalent to 3.5 per cent., and shows a decided improvement on the corresponding figure (5.4 per cent.) of the previous year.

Milk.—191 samples were taken formally, and a further 11 as "appeals to the cow." Of the formal samples 16 were proved to be deficient in either Milk-fat or Non-fatty Solids. Since, however, in six of these cases the "appeal" samples were similarly defective, the formal samples to which they had reference were returned as genuine. No such support for the remaining 10 being forthcoming, they were classed as adulterated, and further action taken. The proportion of adulterated samples is, therefore, 5.2 per cent. In 1923 it was 9.2 per cent. The average composition of all the samples of milk (202) analysed during the year 1924 is as follows:—

Milk-fat							3.57
Non-fatty	Solids						8.87
Water	•••	• • •	•••	• • •	• • • •	• • •	87.56
							100.00

The following are the quarterly averages:—

Jan. to Mar. Apr. to June. July to Sep. Oct. to Dec.

54 samples. 51 samples. 51 samples. 46 samples. Non-fatty Solids ... 8.91 8.82 8.85 8.93 Milk-fat ..... 3.723.41 3.343.80..... 87.37 Water 87.27 87.84 87.74 100.00 100.00 100.00 100.00

Cream.—15 samples were examined throughout the past year. Thirteen were submitted as being "preserved" and two as "unpreserved." One sample of the "preserved" variety was found to contain 0.32 per cent, of Boric Acid in excess of the maximum amount (0.40 per cent.) allowed by the Public Health (Milk and Cream) Regulations, 1912, Amendment Order, 1917.

#### BUTTER AND MARGARINE ACT, 1907.

Eight samples of Butter were submitted for analysis under this Act, and were found to be genuine.

We append list of all the articles analysed during the year 1924 under the Sale of Food and Drugs Acts.

#### We are, Gentlemen, Your obedient servants,

HELLON & MANN.

#### ARTICLES

examined under the Sale of Food and Drugs Acts during the year 1924.

Milk .						191	samples
Butter .						14	,,
Cream, prese	erved .					13	,,
Coffee .						11	; ;
Confectionery	ν,					11	1,
Infants' Food	d.					7	,,
Cocoa .		••				7	,,
Pepper .						6	,,
r - 3.3						5	,,
Baking Powd	ler .					.5	,,
Rice .						4	,,
	irtar .					4	
Sugar .		•				4	,,
Oatmeal .	••	••	•••	•••	•••	4	"
3.0			• • •	•••	•••		2.2
Ol			•••	• • •	•••	$-\overline{2}$	22
Cream, unpre			• • •	•••	•••	$\frac{2}{2}$	,,
Ground Ging		A.	• • •	• • •	•••		,,
~ ~		••	• • •	•••	•••	$\frac{2}{2}$	"
Tonioco	•	••	• • •	•••	• • •	9	,,
Self-raising F		••	• • •	•••	• • •	2 2	, ,
		••	• • •	•••	• • •	-	ماسسوه
T31		••	• • •	• • •	• • •		sample
		••	• • •	• • •	• • •	1 1	٠,
Semolina Custard Pow		• •	•••	• • •	• • •	1	11
		<u></u>	• • •	• • •	• • •		,,
Desiccated Co			••		• • •	1	"
Mustard Cor			• • •			1	11
Mixed Spice Cinnamon		• •	• • •			1	,,
Cimiamon		••	••	• • •	• • •	1	11

Dried Milk						1 s:	unple
	Milk	• • •	• • •	•••	• • •	1	,,
Beef Suet	• • • •	• • •	•••	• • •	•••	1	*
Vinegar	•••	•••	• • •		• • •	1	,,
					_	313	
						010	

#### Tuberculosis.

The following tables show the Tuberculosis Dispensaries, Maternity and Child Welfare Centres, and School Clinics, now open, the Medical Officer in charge, as well as the day and hours of attendance:—

DAYS AND HOURS OF ATTENDANCE AT TREATMENT CENTRES.

Centres.	School Clinic.	Tuberculosis Dispensary.	$M. & C. W. \\ Clinic.$
0000000	Dr. T	•	
Cleator Moor.	1st and 3rd	2nd and 4th Tuesdays 1-30 to 3-30 p.m.	
Millom	1st and 3rd	1st and 3rd Tuesdays 1-30 to 3-30 p.m.	1st and 3rd Tuesdays 12 to 1 p.m.
	Dr. Ha	ydock.	
Wigton	2nd and 4th	2nd and 4th Mondays 1 to 5 p.m.	
Egremont	Thursdays 10		Thursdays 1 to
Maryport		2nd and 4th Fridays 1-30 to 3-30 p.m.	
	Dr. Mc.	Murtrie.	
Penrith	2nd and 4th Tuesdays 10 to	2nd and 4th	
	Dr. M	$f_{ason}$ .	
Cockermouth	2nd and 4th	2nd and 4th Mondays 2 to 4-30 p.m.	_
	Dr. M	anson.	
Whitehaven	_	Every Monday 2 to 4.	_
	Dr. Mac	pherson.	
Workington	-	Monday 2 p.m. Friday 3-30 p.m.	_

#### Dr. Quine.

Arlecdon and Frizington ...

2nd and 4th Fridays 2 to 4 p.m.

During the year 337 primary notifications of Tuberculosis were received; of these 261 related to Pulmonary Tuberculosis and 76 to Tuberculosis other than Pulmonary.

Of the Pulmonary cases 189 were in Urban and 72 in Rural Districts, as against 244 cases (164 in Urban and 80 in Rural Districts) in 1923; whilst of the Non-pulmonary cases 54 were in Urban and 22 in Rural Districts, as against 74 cases (55 in Urban and 19 in Rural Districts) in 1923.

From Pulmonary Tuberculosis there were 153 deaths (97 in Urban and 56 in Rural Districts), compared with 145 deaths (97 in Urban and 48 in Rural Districts) the previous year.

From Non-pulmonary Tuberculosis there were 43 deaths (28 in Urban and 15 in Rural Districts), compared with 67 deaths the previous year.

# Sanatorium Treatment.

At the beginning of the year there were 16 patients, admitted during 1923, still in Blencathra Sanatorium.

58 patients were admitted to and discharged from the Sanatorium during the year, and there were 30 patients in at the end of the year.

In addition 8 children were admitted to and discharged from Stannington Sanatorium during the year, and there were 8 patients in at the end of the year.

The average stay of patients in Blencathra was 95 days, and in Stannington 104 days.

The following table shows the condition on discharge of the 58 patients admitted to and discharged from Blencathra during the year, together with the period of residence in the Institution:—

Condition on Discharge	Length of stay in months.	Under 1 No. %	1-3 No. %	4-6   No. %	7-12 No. %	Tota	
Quiescent	Males Females	$\begin{pmatrix} 1\\2 \end{pmatrix}$ 27	$\begin{pmatrix} 1 \\ - \end{pmatrix}$ 6	$\begin{pmatrix} 1\\1 \end{pmatrix}$ 8	1) 20	7	12%
Much Improved	Males Females	$\begin{pmatrix} 1\\1 \end{pmatrix}$ 18	$\begin{pmatrix} 6 \\ 4 \end{pmatrix}$ 62	$\binom{10}{8}$ 72	$\begin{pmatrix} 2 \\ 2 \end{pmatrix}$ 80	34	59%
No Material Improvement	Males Females	$-{5}$ 45	$\begin{pmatrix} 3 \\ 1 \end{pmatrix}$ 19	$\begin{pmatrix} 3 \\ 2 \end{pmatrix}$ 20	=)-	14 9	24%
Died	Males Females	1	2	_		3	5%

I regret to again have to draw attention to the nonnotification of cases of Tuberculosis. During the year 50 cases, equal to 28% of the deaths registered by local Registrars, were not notified prior to death.

Nor can the position of notified cases be considered as satisfactory, when it is pointed out that 14.7% of these cases were notified from 1 to 30 days prior to death; 16% were notified 1 to 3 months; 11% 4 to 6 months; and 9% 7 to 12 months prior to death.

The attention of Local Authorities has again been drawn to the non-notification of cases by the Ministry of Health in Circular 549, issued the 22nd December, 1924. It is hoped that Local Authorities will make every endeavour to secure early notification; it is fair neither to the patient nor those responsible for treatment to delay notification until within a few months of death.

Whilst drawing attention to the fact that under the Public Health (Tuberculosis) Regulations both Medical Practitioners and Local Sanitary Authorities have definite and well defined duties to perform, it must not be lost sight of that those suffering from Tuberculosis have also definite responsibilities to themselves, their relatives, and to the general community, as well as to the County Council, who are trying in all possible ways to ameliorate their unfortunate condition and are spending large sums of public money in their endeavour.

It cannot be stated too often or too emphatically that the earlier treatment is commenced the more likely is cure to be brought about. Every year many cases are met with, notified by a Medical Practitioner as Tuberculosis, his opinion concurred with by a Tuberculosis Officer, and in some cases both opinions confirmed by a bacteriological examination of the sputum, and yet, because the patient does not feel acutely ill, treatment is refused or postponed until all hope of a permanent cure has passed, and the best that can be hoped for is a temporary arrest of the disease.

But it is not alone in this way that responsibilities are neglected; it has a much more serious aspect as regards relatives and the community at large. Whilst Tuberculosis is a highly infectious condition, it is easy to prevent the infection spreading to others by a few simple precautions.

All cases sent to a Sanatorium and all cases visited by the Tuberculosis Officers are taught how to prevent spreading infection to others, but one of the most difficult tasks we have is to persuade some patients to carry out these simple precautions.

# Dispensary Treatment.

Eight Dispensaries have been open during the year, and they have done excellent service. It has long been recognised, however, that a Dispensary does not fulfil its function properly so long as attention is confined to known cases of Tuberculosis. A Dispensary must be the centre from which cases of Tuberculosis are sought for, and, therefore, during this year as much time as possible has been devoted to the search for "contacts." It is hoped that it may be possible to devote much more time to this work.

Adult "contacts" are frequently difficult to deal with; they often refuse to be examined for one reason or another, and frequently without any reason at all. The time has not yet arrived when everyone must recognise that to be medically examined at least once in every year is a duty he or she owes to himself or herself as well as to the community, in order that the earliest manifestations of oncoming disease may be recognised and measures of prevention taken in time, and this applies to many diseases as well as to Tuberculosis.

Child "contacts" are easily and satisfactorily dealt with at the School medical inspection. Each Medical Inspector is furnished with a weekly list of notified cases of Tuberculosis, and the children coming from a house in which there is a case of Tuberculosis are classified as "specials," and are, therefore, thoroughly examined in school and are kept under observation throughout their school life.

During the year there were 1,448 attendances at the Dispensaries. 371 visits were paid by the Tuberculosis Officers and 948 by Nurses to the homes of patients.

315 "contacts" were examined, but this number will, I hope, be greatly increased in the future.

Dr. Towers, reporting on the work in his area, says:—

Of the two Dispensaries in this area, Cleator Moor and Millom, that at Cleator Moor has been exceptionally well attended during the year. It is the one section of the work that at times has been congested.

There has been a steady increase in the number of "casual consultations" at both Dispensaries, but more particularly at Cleator Moor. An increasing number are attending of their own accord, asking to be examined. These cases generally come on the recommendation of other cases on the Registers. There appears to be a steadily growing fear of infection by the tubercle bacillus.

A great many cases have been sent to the Dispensaries by practitioners for an opinion, especially from the Egremont district, and the vast majority have been subsequently notified.

On 13 occasions consultations have been held with practitioners at patients' homes—6 at Egremont, 6 at Frizington, and 1 at Millom. This number would have been larger but for the fact that on several occasions, after a consultation had been arranged, the practitioner has been prevented at the last moment from turning up. At times it has been found difficult to arrange unutually suitable times for consultations, surgery hours on the one hand and clinic hours on the other tending to make things difficult.

Contacts.—The figure given as the number of contacts examined is most misleading. This has been owing to no definite system having been adopted until late in the year to ensure supervision of contacts. A more correct idea of the number of contacts examined would be got by multiplying this figure by three. During this year to date close on 100 contacts have been examined, and it is found that at least 50-60% of these were examined last year, without it being realised at the time that they were contacts. These, of course, are not included in the figure quoted.

Domiciliary Visits.—Beyond visits paid to those cases that were unable to attend the Dispensary very little home visiting has been possible.

#### TABLE OF ATENDANCES.

$\Lambda$	lillom.	Cle	ator Mo	or.	Total.
Attendances	129		245		374
Casual Consultations	17		39		56
Domiciliary Visits			38		54
Contacts Examined	13		20		33
Contacts: Healthy 29.	Susp	icious	4. Tu	bercul	ar 0.

Dr. Mark Fraser reports as follows on the work at Englethwaite Industrial Colony:—

#### General Statement.

In view of the fact that the County Council have decided to close Englethwaite as a Colony at an early date and consider a scheme of conversion into an Institution for the reception of delicate and other children, it is only necessary to review very briefly the working of the Colony during the financial year ended March 31st, 1925.

When the Colony is closed it will be necessary to prepare an exhaustive report on its working from the beginning, and on the results achieved. The present position of the ex-Colonists will, therefore, not be considered in this Report, and the question of after-care will not be dealt with.

## IMPROVEMENTS.

Apart from the necessary running repairs to engines, boilers, etc., and general repairs to the Main Buildings, no important alteration has been carried out.

The timber which was felled during the previous year has been sawn into rails, posts, and firewood. The rails and posts have been used to repair the Colony fences, which were in very bad repair, and have now been largely renewed. Many cartloads of firewood have been sold, which greatly helped to meet the original outlay on the felling of the trees and the sawing up of the timber.

#### Administration.

#### 1. Discipline.

The general discipline and conduct of the great majority of the Colonists has again been most satisfactory.

#### 2. Recreation.

As in former years, whist drives, billiard tournaments, etc., arranged by the Sports Committee, took place each Saturday evening during the winter months. This series of competitions was attended by nearly all the Colonists, and was thoroughly enjoyed. An open whist drive was again arranged, and a concert by the Colonists themselves provided a most successful entertainment.

Through the kindness of the Church of Scotland Choir and Mr. Bates' "A" and "B" Concert Parties, Carlisle, some very enjoyable evenings were spent.

In addition to the above, a sacred concert was given by the "Village, Country Town and School Concert Party."

These concerts were all open to the public, and were very greatly appreciated. Donations from the audiences were sufficient to defray the expenses.

# Medical Report.

The average number of beds occupied throughout the year was 33. This figure, being only one below that for the previous year, may be considered highly satisfactory, more especially as great difficulty has again been experienced in keeping the beds at the Colony fully occupied. The reasons for this are the same as formerly, viz.: (1) Fewer ex-Scrvice mcn (with pensions) now require residential treatment. (2) Civilians can only stay a few months in the Colony, as, in their absence, their wives and families find it very difficult to make ends meet.

At the beginning of the fluancial year 1924-25 37 Colonists were in residence, and during the year 36 new cases were admitted, so that, in all, 73 men received treatment and training throughout the year. Of this number 14 were Cumberland ex-Service men, 9 were ex-Service men from other areas, and the remaining 50 were Cumberland civilians.

The physical conditions of these 73 men were classified as follows:—

Pulmonary.

- 1. Early ... 15 Cases.
- 2. Intermediate ... 36 ,,
- 3. Advanced ... 21 ,,

Non-Pulmonary.

Bones and Joints ... 1 Case.

From the above table it will be seen that a large number of the cases treated were not typical Colony cases, but some were Sanatorium cases and others were advanced cases.

In spite of this fact, the results of treatment for the year were, on the whole, very satisfactory. A larger number than usual of Colonists proper were fortunate enough to be able to go home and start work at once. The majority of the other patients materially benefitted by their stay at the Colony.

The following table shows the position of the 73 men at the end of the financial year, March 31st, 1925:—

Taken on Paid Staff			1
Discharged at end of period of	treat	ment	
granted			31
Discharged to other Institutions			4
Discharged as unsuitable			4
Left of own accord			5
Died at Englethwaite			1
Remaining in the Colony			27

Of the 46 men who ceased to be patients, the following table shows the state of their health at the time of their discharge:—

Fit for work			 	15
Fit for light work			 • • •	10
Condition improved	• • •		 	7
Condition unchanged	1	• • •	 	4
Condition worse			 	9
Died			 • • •	1
				<b>4</b> 6

# Report on Industries.

In the last Annual Report the whole question of the necessity of having Industries, and their great value in the treatment of pulmonary tuberculosis, was fully considered and explained.

It is therefore unnecessary now to do more than give a short review of the individual Industries. The actual loss on the Trading and Profit and Loss Account of the combined Industries for the financial year ended 31st

March, 1925, amounts to £1,151–16s. This figure is considerably higher than that of the previous year, and is largely accounted for as follows:—

- (1) Owing to the new Invoice System inaugurated by the County Accountant quicker payments are made possible; and in this way an extra three weeks' payments more than those for a full financial year have been included.
- (2) Although the Poultry Farm showed much better results on its Income and Expenditure Account the loss on its Profit and Loss Account was much larger than that of the previous year. The reason for this lies chiefly in the fact that last year the stock was much over-valued. Practically the same head of poultry have had a drop of £200 in value. All poultry has undoubtedly gone down in value, but not to the extent indicated by the valuations. Further, the Poultry Farm incurred through unfortunate circumstances a bad debt of over £42.

(3) The patients have been much less fit for work, and therefore the cost of running the Industries has been correspondingly high.

The financial position of the individual Industries will be found in the Financial Statement appended, and the detailed accounts of each Industry are available for inspection should further information be desired.

#### 1.—The Market Garden.

The area under cultivation has been nearly 11 acres, but of this one acre was sown down to corn and permanent pasture, so that at the end of the year approximately 10 acres were under cultivation. In view of the proposed conversion of the Colony, 3 acres more are being sown down to corn and permanent pasture.

The trade in seedlings, cut flowers and pot plants has been very satisfactory. The fruit crop was only fair, and the other crops were not so good as in former years, owing to the wet season. Potatoes were a good crop, and the price has been higher than usual throughout the year. The crop of hay was more than sufficient to feed the horses throughout the whole winter.

The loss on the Market Garden is less than in previous years, and as the ground is now getting into good condition there is no doubt that in time this Industry would have become entirely self-supporting.

# 2.—The Poultry Farm.

As has been previously explained, this Industry has given better results so far as its Income and Expenditure Account is concerned, but on its present scale it could never prove a financial success.

It is much too small, and has to employ far too many men for the head of poultry carried. The same number of men could easily look after three times the number of hens.

The Poultry Farm has had to employ large numbers of men, who have had to be given light work in view of their poor health. These men must be given employment, and the Poultry Farm is practically the only Industry where it is possible to find light work for them,

During the Spring of 1925 a very considerable number of early chickens were hatched, and as these have done well a considerable improvement in the position of this Industry for the next year may be anticipated.

# 3.—Clog-making.

For about six months of the year this Industry has again been carried on. No new clogs have been made, but a large amount of repair work has been executed, and the Industry has been almost self-supporting.

# 4.—Joinery.

This department has, on the whole, had a fairly satisfactory year, but the number of men employed throughout the year has been small. Only young men, as a rule, can be taught joinery, and it is only under exceptional circumstances that a good joiner can be made of the average Colonist.

The loss on the Industry has been higher than in previous years, because the amount of work obtainable has been gradually diminishing, and the head joiner's wages have had to be paid all the time. The Hospitals Sub-Committee decided in February, 1925, to close this Industry in May, 1925, as sufficient work was not forthcoming to carry on the Industry successfully.

Without the necessary machinery it is almost impossible, in these days, to make a joiner's shop show profits, because the public is unwilling to pay for hand-made goods when machine-made articles can be purchased more cheaply, and for a time, at least, serve the same purpose.

# Donations to Colony.

The following gifts have been received, and are gratefully acknowledged:—Clothing from Lady Mabel Howard; case of apples from Colouel H. Ballantine Dykes; salmon and venison from Mr. Norman Fletcher; monthly supply of magazines and periodicals from Mrs. Norman Fletcher; round of beef from Messrs. T. Scott and Son, Cotehill; fruit and cakes from Messrs. Cooper & Co., Carlisle; Christmas cakes from the South-End Co-operative Society.

#### Finance.

The expenditure, as previously noted, contains an extra three weeks' payments over those usually made in a full financial year.

Income. Ye	AR END	ер 31s	t Marc	н,	1925.			
	Actua Rece		Other Credits.			Total.		
MAINTENANCE.	£	s. d.	£	s.	d.	£	s.	d.
Ministry of Health (Discharged Soldiers and Sailors)	1450	0 0				1450	0	0
Maintenance of Patients from Outside Areas	555	8 5	-	_		555	8	5
Other Receipts (Sale of Firewood, etc.)	44 1	.9 10	4	0	8	49	0	6
MAINTENANCE OF OUTDOOR								
STAFF. Credit to Provisions	_		138	13	5	138	13	5
,, Fuel, Light & Cleaning			8	3	2	8	3	2
,. Rent, Rates, and Taxes			16	6	4	16	6	4
Industries.								
Market Garden	358 1	.0 7	694	5	3	1052	15	10
Poultry Farm	535	4 3	731	13	3	1266	17	6
Clog-making	66 1	7 8	63	16	4	130	14	0
Joinery	314	0 0	215	7	4	529	7	4
Total£	3325	0 9	£1872	5	9	£5197	6	6

Expenditure.	YEAR	EN	DED :	Blst Mar	сн, 19	25.	,	
			Cash $nts$ .	Oth Cha)		Total for		
COST OF MAINTENANCE.	£	s.	d.	£ s	. d.	£	s.	d.
Provisions Fuel, Light & Cleaning	1677	16	5	245 3	3 1	1922	19	6
(including Laundry).	579	17	8	45 13	3 0	625	10	8
Repairs—Buildings	127	11	8	36 13	l' 7	164	3	3
Repairs—Machinery	47	1	2	_		47	1	2
Furniture, Bedding & Kitchen Appliances	100	8	4	5 9	3	105	17	7
Drugs and Appliances.	47	6	10	_		47	6	10
Rent, Rates, Taxes and Insurance	120	3	6	_		120	3	6
Travelling Expenses of Medical Superinten-								
dent	25	0	0	_	•••	25	0	0
Travelling Expenses of Staff	8	7	0	_	•••	8	7	0
Travelling Expenses of Patients	2	7	3	_		2	7	3
Printing, Advertising, and Office Expenses.	147	7	5	_		147	7	5
National Insurance	21	-3	9	_		21	3	9
Other Payments (Sawing Timber, etc.)	65	2	2	10 1	0	75	3	2
Hospital Grounds	66	17	2	27 3	3 9	94	0	11
House Porter	95	19	11			95	19	11
Loan Charges	729	11	8	_		729	11	*8
SALARIES.								
Medical Superintendent (Proportion)	250	0	0			250	0	0
(Proportion) Matron and Nurses	234	6	0	_	•••	234	6	0
Domestic Staff	281	7	7			281	7	7
	201	•			•••	201	·	•
COST OF INDUSTRIES.						****		
Market Garden	661	8	6	661 15		1323	3	9
Poultry Farm	1157	9	3	892 (		2049	15	?1
Clog-making	44	11	9	90 {		135	1	8
Joinery	375	-8	1	248 1	3	623	9	4
Total£	26866	13	1	£2262 14	9	£9129	7	10

# PUBLIC HEALTH (VENEREAL DISEASES) REGULATIONS, 1916.

# Report of the Assistant Medical Officer of Health (Venereal Diseases) for the Year ended 31st December, 1924.

During the year 416 persons were dealt with at the Treatment Centres, of whom 254 attended for the first time, the remainder having been carried over from 1923.

68 of these were found not to be suffering from Venereal Diseases, leaving 348. This figure for the year 1923 was 379, so that there was a decrease of 31 persons under treatment or observation for Venereal Diseases. As is pointed out below, this decrease was due to a reduction in number of patients suffering from Syphilis, those suffering from Gonorrhæa having increased in number.

	•		
Areas in which patients resided.			Total attendances
Carlisle	118		3619
Cumberland	125		924
Westmorland	3		11
Dumfriesshire	2		45
Ireland	2		12
London	2		2
Durham	1		21
Lancashire	1		2
Total	254		4636
4.07(((1 11111111		•••	

# Pathological Examinations.

Wassermann Tests were carried out at the Public Health Laboratory, Manchester. 319 of these were done for patients attending the Clinics and 26 for patients under private treatment by practitioners, the Local Authority bearing the expense. In addition 87 bacteriological tests were carried out for patients attending the Clinics, most of which were done by the Medical Officer at the Clinics,

# Approved Arsenobenzol Compounds.

These were supplied free to any of the practitioners on the approved list who applied. The number of doses issued in this way was 31.

At the Clinics 453 doses were administered, nearly all by intravenous injection. Of these 258 were for patients residing in Carlisle, and 195 for those residing in Cumberland. The remaining 15 were given to patients from other areas.

#### Treatment Centres.

#### Carlisle Clinic.

The premises occupied at the Cumberland Infirmary were the same as in the previous year, and were in most respects entirely suitable for the conduct of an out-patient Clinic. No adequate provision was made for in-patient treatment, though one bed in case of emergency could be placed in one of the rooms. It was not found necessary to use this room in this way during the year, though it was of great use for the examination, treatment, or recovery of patients, and was frequently found necessary as an additional waiting room when men and women arrived at the same time.

Clinics were held on the same days and at the same hours as in 1923 (five sessions per week), and the medical orderly was in attendance every evening except Sundays.

During the year 277 patients were dealt with—a decrease of 26. 166 patients attended for the first time—a decrease of 3. The total attendances numbered 4,009—an increase of 666. This is accounted for by the increase in the number of patients suffering from Gonorrhæa, who necessarily attend at more frequent intervals than those suffering from Syphilis.

346 doses of Arsenobenzol Compounds were given, and 210 Wassermann Tests were done.

The attendances by persons residing in Carlisle were 3,619, in Cumberland 297, and in other areas 93.

#### Whitehaven Clinic.

Clinics were held on Fridays at the same hours as in previous years in the Whitehaven and West Cumberland Infirmary. There was no alteration in the arrangements generally.

The total number of patients dealt with during the year was 139—a decrease of 10. The number of new cases was 88—a decrease of 8. The total attendances were 627—a decrease of 290. In contrast to the Carlisle Clinic this decrease in attendances is due to the decrease in numbers attending, while no provision is made for intermediate treatment of Gonorrhæa. Those suffering from Gonorrhæa increased in number by 7, but did not attend at more frequent intervals than those suffering from Syphilis, viz., only once a week.

109 doses of Arsenobenzol Compounds were given and 142 Wassermann Tests were done.

The new Infirmary buildings are now nearing completion, and it is expected that they will be occupied by mid-summer 1925 at latest. The out-patient rooms in the new Infirmary are more conveniently arranged, but unfortunately only three rooms are available—waiting room, consulting room, and treatment room. It is hoped that possibly the use of a fourth room may be granted on Friday afternoons. The attendance of female patients would be greatly encouraged if this could be done. Negotiations with the Infirmary Committee are now being made.

RETURN relating to all Persons who were treated at the Treatment Centre at Carlisle and Whitehaven during the year ended the 31st December, 1924.

	Sypl	Syphilis		Syphilis		Soft Chancre.		rihœa,	Conditions other than Venereal.		То	taI
	M	$\mathbf{F}$	М	F	M	$\mathbf{F}$	M	F	M	F		
<ol> <li>Number of persons who, on the 1st January, 1924, were under treatment or observation for:—</li> <li>Number dealt with during the year in the out-patient Clinic</li> </ol>	73	37	1	0	39	12	0	0	113	49		
for the first time and found to be suffering from:	31	33	11	0	-82	29	40	28	164	90		
Total—Items 1 and 2	104	70	12	0	121	41	40	28	227	139		
3. Number of persons who ceased to attend the out-patient Clinic (a) before completing the first course of treatment for (b) after one or more courses but before completion of treatment for (c) after completion of treatment, but before final tests as	7 27	9	1 0	0	31	0	0	0	39	22 16		
to cure of 4. Number of persons transferred to other Treatment Centres after treatment for 5. Number of persons discharged from the out-patient Clinic after completion of treatment	3	10	1	0	2	2	0	0	6	12		
and observation for:— 6. Number of persons who, on the 1st January, 1924, were under treatment or observation for:—	50	33	6	0	25 58	23	0	0	35 110	1 56		
Total—Items 3, 4, 5, and 6	104	70	12	0	121	41	0	0	237	111		

Total attendances of all persons at the Out-patient Clinic: 4,636.

Number of doses of Arsenobenzol Compounds administered in Out-patient Clinic: —468.

Examinations of Pathological material:—For Wasserman, Re-action, 319; Other Organisms, 87.

## Enquiry into the Incidence of Syphilis and Gonorrhæa in Cumberland during the 5 Year Period, 1920-24.

Five years have now clapsed since the Venereal Diseases Clinics were instituted in Cumberland, and it is of great interest to note the variations in the incidents of Syphilis and Gonorrhea.

This is graphically shown on the accompanying chart. The number of new cases of Syphilis fell from 99 in 1920 to 29 in 1924. The figure for 1920 is rather misleading, as this was the first complete year of the Clinics, and consequently the number of new cases was abnormally high. Allowing for this, the rapid decrease is remarkable.

Still more striking is the steady fall of cases of recently acquired Syphilis. Here the 1920 figure, of course, is not in any way misleading, and there is a steady decrease from 29 to 0.

Congenital Syphilis appears to have reached its maximum in 1923 and to be now declining. New cases of this nature will naturally continue to appear for the next 20 years or so.

We can with confidence look forward to the time when Syphilis in this country will be almost a thing of the past, and those cases which do occur will be contracted for the most part abroad. In more populous areas and great cities the extermination of the disease will actually take longer than in Cumberland, but it appears to be merely a question of time. The resulting benefit to the health of the community will be enormous, and the longevity of the race will be very materially increased.

One cannot say the same about Gonorrhæa. There is no really satisfactory treatment now known for this disease, and all the efforts made to combat it merely tend to shorten the period of infectivity. Many cases are still untreated or insufficiently or improperly treated, and many cease to attend before they are rendered non-infective.

In the chart the figure for 1920 must be disregarded as being abnormally high. From 1921 to 1924 there has been apparently a steady rise in the incidence of Gonorrhea in Cumberland. The number of new cases in 1921 was 25; in 1924 it was 47. To some extent this may be discounted by the increasing popularity of the Clinics, but there can be little doubt that the real explanation is that the disease is spreading, and there seems to be no reason why it should not continue to spread, unless more adequate means can be found to combat it.

Maternity and Child Welfare.

At the end of the year there were 90 Midwives on the Roll, 82 trained and 8 untrained, who attended 2,743 cases, 1,512 in Urban Districts and 1,231 in Rural Districts.

In Urban Districts 58% and in Rural Districts 65% of the registered births were attended by Midwives.

Miss March, the Superintendent of the Cumberland Nursing Association, is also the Inspector of Midwives. 344 visits of inspection were paid by her.

Section 14 of the Midwives Act, 1918, makes it the duty of a Midwife, in case of an emergency, to call to her assistance a registered medical practitioner. The number of cases in which medical help is sent for rises steadily year by year; in 1921 there were 73 cases, whilst in 1924 there were 143.

The amount paid in fees for such medical help was £136 15s. 6d.

Medical help was sent for for the following conditions:—

Abortion and Threatened	Abortion	 	1
Hæmorrhage		 	4
Other Causes during Preg	gnancy	 	2
Ruptured Perineum			
Uterine Inertia			
Retained Placenta			
Delay in Labour			
Malpresentation			
Excessive Bleeding			
Rise in Temperature		 	4

Dangerous Feeblesness	 	 	 7
Inflammation of Eyes			
Prematurity	 	 	 7
Still-birth	 	 	 3
Other Abnormalities	 	 	 5

Attention has frequently been drawn to the unsatisfactory way in which the requirements of the Notification of Births Acts have been carried out in some districts. In the Urban Districts of Aspatria 42%, Cockermouth 24%, in Egremont 42%, and in Holme Cultram 27%, and in the Rural Districts of Bootle 12%, Cockermouth 15%, and Longtown 18% of the births were not notified.

The following is a summary of work done by Health Visitors and Nurses during the year:—

Heali	th Visitors.	-Dis	$strict\ Nurses.$
Visits to Infants (New)	798		1,846
,, $(Old)$	3,732		19,395
Ante-natal Visits	17	• • •	4,600
Visits 1-5	327		4,089

The supply of milk, both whole and dried, to expectant and nursing mothers and to young children has been continued during the year, a sum of £1,408 having been expended, but £95 was recovered for dried milk.

In previous Reports I have expressed the hope that a considerable extension of Maternity and Child Welfare Work might be possible, but unfortunately one of the causes which makes this work all the more urgent is the very cause which prevents any extension of our present limited work, viz., unemployment and consequent lack of money.

There are at present only six Clinics open for Maternity and Child Welfare work at Arlecdon and Frizington, Cleator Moor, Millom, Maryport, Egremont, and Wigton (voluntary), but it is impossible for the medical staff to give more time to this work, important as all must recognise it to be.

The following extracts from the reports by the members of the medical staff engaged in the work are interesting and instructive.

Dr. Towers, reporting on the Clinics at Cleator Moor and Millom, says:—

These Clinics have been and still are steadily growing in popularity. When the programme of sessions at

Cleator Moor was changed and a half-day given to this work, one wondered at first whether the attendances would justify the time. However, the point has now been reached when it is necessary to "go all out" the whole morning and waste no time, and even so, it is impossible to finish at mid-day, the sessions invariably extending to 12-30 or 12-40. This shows that the special session is well justified. At Millom the attendances have also been good, and the size of the Clinic shows a tendency to increase, but as this Clinic is shared with the School Clinic hours, it has not been as satisfactory as it might have been, owing to the extreme congestion. opinion that if a special session were given here as at Cleator Moor there would be a decided increase in attendances, and at the same time afford much-needed relief to the School Clinic.

Expectant and nursing mothers have come for advice, as well as bringing their babies.

Speaking generally, the very excellent condition of the vast majority of the babies brought has been somewhat remarkable. This is in very striking contrast to the health of the average mother. It is not difficult to understand why infants should suffer to a less extent by continued unemployment and privation than older children and adults, the chief factor being feeding. In this respect the infant is the only member of the family whose diet is practically unaltered both as regards quantity and quality, either because it is breast fed or because it is supplied with a suitable and wholesome substitute in the form of fresh cow's milk suitably modified or dried milk.

It is a very significant fact that as far as this district is concerned the poorest and most ill-nourished infants are those who are being breast-fed. It is in these cases where the full effect of continued unemployment, poor feeding and housing is seen. The average mother is quite unfit to breast-feed an infant. It is quite a common occurrence for mothers to arrive at the Clinic markedly dyspnoeic and cyanosed, with tachycardia and general cardiac irregularity. Anamia is found to be intense, bleached gums, lips, and mucous membranes, etc. Whether or not anamia of this sort, kept up for indefinite periods by the unsatisfactory conditions which produced it, eventually can change from the simple to pernicious in

type, is possibly a very debatable matter, but there can be no doubt whatever that an infant is deriving no good from breast feeding under such conditions, while the damage to the mother's health is profound.

The improvement in the infant is obvious, and generally immediate, when either dried or fresh cow's milk is substituted. The mother, on the other hand, does not improve either so markedly or rapidly, and cannot be expected to do so, for, although the drain on her strength has ceased, she continues to live under the worst conditions, just those conditions which caused her inability to nurse the child in the normal manner.

In my experience there is no doubt as to the superiority of dried milk over fresh cow's milk. I have no doubt that this is partly due to failure to modify the latter suitably. It is also very evident that the District Nurses are of the same opinion, to judge by the number of cases that come from far afield to apply for Ambrosia, saying that their District Nurse had advised them to do so. Mothers are instructed to give it with some lemon, orange, or prune juice in it.

The very vast majority of defects for which infants are brought are traceable to irregular and injudicious feeding, with consequent alimentary tract disturbance, teething troubles, skin rashes, etc.

Table of $A$	ATTEND: ndividu		ES.		
	Cases.		A	tten	dances.
Cleator Moor	173			4	179
Millom	77			5	268
Total	250		•••	-7	747
AGE A:	VALYSIS	;.		_	_
	Cleator				
	Moor.		Millom		Total.
Under 3 months			10		62
Under 6 months			13		44
Under 9 months			1		8
Under 12 months			4		11
Over 12 months	76		49		125
Total	1~9				250

Dr. Haydock reports as follows:—

MATERNITY AND CHILD WELFARE.

Sessions are held weekly at Maryport and Egremont, and I attend the Voluntary Centre at Wigton fortnightly.

Owing to the increase of unemployment, but also partly due, I think, to the Clinic being more widely known, it was found necessary to allot an afternoon weekly to the Maryport M. and C. W., as the number attending was much too large to deal with between the School Clinic and Dispensary twice monthly. There are over 100 infants under school age on the register, and (apart from re-attendances for milk issue) 20 to 25 are seen and examined weekly.

At this Centre there is practically no fresh milk issued, and except for the breast-fed babies the great majority are reared for the first 9-12 months on dried milk. I have been impressed by the results obtained. Though personally I prefer fresh milk for infant feeding, there are many advantages in using the dried product, especially in the poorer homes.

Fresh milk when purchased in small quantities is only delivered once daily, and so a portion must be kept 24 hours. When this is stored in hot living rooms, probably uncovered and "dipped into" by the older children, it is impossible to ensure anything like ordinary cleanliness.

The difficult period with regard to feeding seems to lie between the 9th and 18th months. I think the majority of parents are now beginning to realise the foolishness and harm that arises from giving "pickings" to children under 7-8 months.

I am surprised that the virtues of oatmeal porridge are not appreciated in a county so near the Scottish border, and I am convinced that very material benefit would result if it were more widely used in place of "bread pops," which appears to be a general favourite for the period immediately after weaning.

The Wigton Clinic is carried on on entirely different lines from that in Maryport. It is more of a social function for the mothers, and does a great deal of good work among those who attend. The advice given is more on general lines, and detailed examinations of individual cases is only occasionally carried out. In a gathering like this a healthy rivalry with regard to progress, etc., exists. Unfortunately many of the poorer parents and those who cannot afford to have their babies as well dressed as their neighbours do not come. Through the activities of the Health Visitors some of this latter class come for advice to Proctor House on School Clinic days.

I would like to see a larger attendance of expectant mothers at these Clinics. The few who do attend are applicants for milk or come on account of other children. It is difficult to get in touch with the most important class—the primiperae.

Dr. Quine reports as follows on the work at the Frizington Clinic:—

The work of the Clinic started in January, 1924.

The difference in the children brought to the Clinic in the beginning of the year and the same children at the end of the year was very satisfactory. They were healthier, cleaner, and better developed in every way. Many of them were beautiful pictures of health. The mothers also seem to have improved. They were no longer merely interested in getting a little extra food; they were now more keen on their children being and looking well.

A mild rivalry seems to be established between the mothers as to the progress of their children. I have no doubt that their association and discussions about baby matters at the Clinic tends to develop this. As their knowledge increases so does their interest and emulation.

## STATISTICS.—WORK AT THE CLINIC.

During the year 1924 there were 1,022 attendances at the Clinic, a monthly average of 85.

695 applications were made for extra nourishment.

523 orders were issued, an average of 43 per month.

20621 pints of milk were issued on these orders.

The cost of the milk supplied amounted to £238 13s. 1d. In addition 202 packets of dried milk were given out; cost £15 3s. 0d.

327 mothers attended with their children (an average of 27 per month).

## WORK IN THE HOMES.

- 150 visits were made by the Frizington Nurse to expectant mothers.
- 49 confinements were attended by the Nurse.
- 561 visits were paid by the Nurse during the lying-in period.
- 1068 visits were paid by the Nurse to children under one year.

Total visits paid by the Nurse, 1,779.

The record of work done by the Kirkland Nurse is not included in the above.

A small stock of linen and requisites for lying-in has been provided by friends for use in cases where the parents are very poor. This is in the care of the Nurse at Frizington. The extension of such a provision is desirable.

There is one aspect of Child Welfare Work which I think might be more cultivated with great advantage. I refer to the personal as distinct from the communal interest in poor children.

There must be many women of kindly heart of some leisure who would be the better for some definite interest in life, outside their own homes, whose innate desire for service for others might find expression in Child Welfare Work.

There are thousands of little babies below the school age who do not have a fair show in life; the burden of handicap which they carry is too much for them. They (and their mothers) need help, not the help of charity or of patronage, but the help of sympathy and interest which a woman of kindly heart can so easily give without offence. To bring these two kinds of people together is the difficulty.

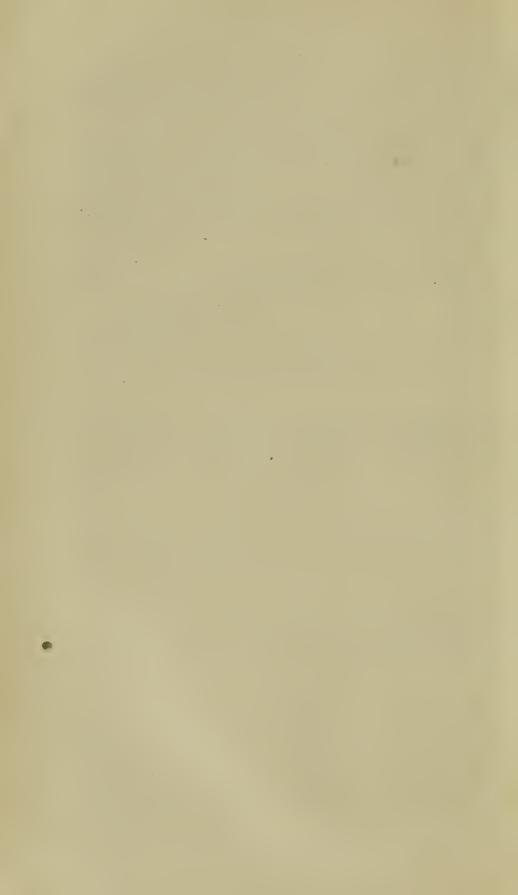
I suggest the formation of a "Guild of Secular God-Mothers" (for want of a better name), each member of which would take a personal interest in one little child and give it a helping hand along its uphill journey. A very little money would go a long way, but a little personal interest and sympathy, little consultations and planning with the mother how to arrange things for the little one, would go infinitely further. Work of this kind would indicate true nobility, and would do more to heal the divisions of society than any amount of preaching.

I have the honour to be,

Ladies and Gentlemen,

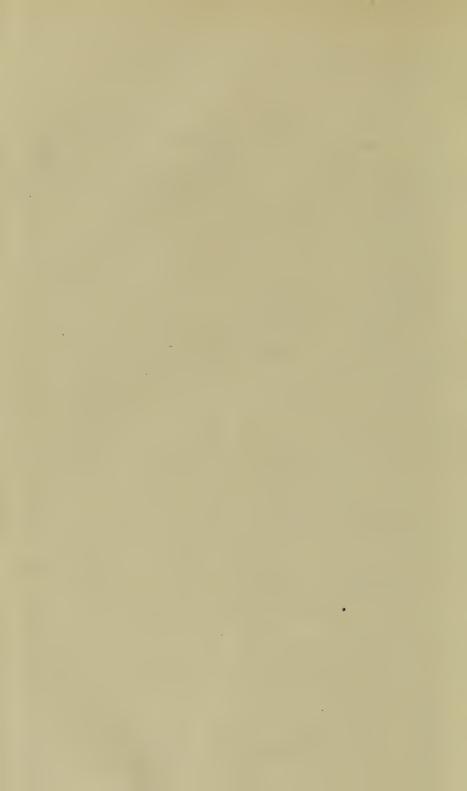
Yours obediently,

F. H. MORISON.



## Causes of Death in the Administrative Areas in the County of Cumberland, 1924.

CAUSES OF DEATH.	Working M.B 03				or Moor. Coc. U.D. 06	kermouth. I U.D. 07	Gremont. H U.D.	urrington. ( U.D. 15	Holme Dultram. K U.D.	eswick. Ma U.D. 17	ryport. M U.D. 24	fillom. Pens U.D. U 25	rith. White J.D. 1 26	haven. Wig M.B. U	ton. Aggrega U.D. U.D.	Alstonate of Garr	n with rigill. Boo .D. R.	otle. Bra .D.	mpton. Ca R.D. 18	rlisle. Cockerme R.D. R.D.	outh. Longto	wn. Pen	rith. Whiteha	ven. Wigi R.D.	on. Aggregate of R.D.'s.
ALL CAUSES	м.				1. F.	M. F. 27 39	м. <b>г</b> . 53 39	23 22	M. F. M 29 26 2	8 30 7	I. F. M	I. F. M.	F. M. 64163	F. M.	F. M.	F. M.	F. M.	F. M.	. F. M	. F. M.	F. M. 29	F. M. 38	F M. 39		F. M. F.
1 Enteric Fever 2 Small-pox 3 Measles 4 Scarlet Fever 5 Whooping Cough 6 Diphtheria		1 — — —			= = ::::	  		  		= = = = = =			 4 1	$\begin{array}{c} - \dots - \\ \hline 1 \dots - \\ \hline 1 \dots - \\ \hline 2 \end{array}$	6 6 14	$ \frac{1}{1} \dots - \frac{1}{1} \dots - \frac{3}{15} \dots - \frac{3}{15} \dots - \frac{3}{15} \dots $	  	  	  1	<del>-</del>	1 — — — — — — — — — — — — — — — — —	  2		   4	1  2 1 9 5 12
7 Influeuza 8 Encephalitis Lethargica 9 Meningococcal meningitis 10 Tuberculosis of Respira System	tory	4 2 1 	= ::: -	- 2 1 1 - 1	·	= =:::	:::			- = ::: -	= = :::: =	i	= =	1 =	1 2	3 —			1	 	2 — — —	3 2	1 9	3 5	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
11 Other Tuberculous Diseas 12 Cancer, malignant Diseas 13 Rheumatic Fever 14 Diabetes 15 Cerebral Hæmorrhage, et 16 Heart Disease 17 Arterio-sclerosis 18 Bronchitis 19 Pneumonia (all forms) 20 Other Respiratory Disease	es 2 e 20 1 1 cc 15 28 3 15	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1 2 1 2 6 1 5	4 4  1 3 4 5 1 1 - 1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1 1 - 4 - 1 3 2 3 3 2 4 6 4 3	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$egin{array}{cccccccccccccccccccccccccccccccccccc$	$egin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	8 1 58	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	6 15 3 8 4 5	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	5 8 3 2 5 4	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
21 Uleer of Stomach or Duodenum	ars) 3 s 2 ritis 4 ases tion -	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		 - 1 - 1				$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		i =	1  - 1	1 1 1 – 1 1 1 1 1 2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	4 1 1 1	$\begin{array}{cccc} - & \dots & 6 \\ - & \dots & 11 \\ - & \dots & 7 \\ - & \dots & 5 \\ 1 & \dots & 21 \end{array}$	5 — 8 — 3 — 18 2 4 —	1 1 1 1 1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	  2 1	1		1 1 2 3 	2	1	3 <u>-</u> 5 <u>-</u> 2
30 Other Deaths from Viol 31 Other Defined Diseases 32 Causes Ill-defined or Unki Special Causes (included at	Sirth 13 1 ence 12 31 1	5 7 4 4 33 8 		$\frac{4}{2} - \dots - \frac{4}{5}$	1	<u>6</u> 2	$\frac{1}{17}$ $\frac{-}{7}$	<u> </u>	$\frac{2}{7}$ $\frac{1}{7}$	4	5 —	1 — 3	2 13	7 — 8 —	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	36 <u>—</u> 26 3	$\begin{array}{cccc} - & \dots & 1 \\ - & \dots & 1 \\ - & \dots & 2 \end{array}$	. 2 3 1 2	$\frac{3 \dots 7}{3 \dots 2}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1 1 - 1 1 -	<u>6</u> <u>-</u>	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1	$egin{array}{cccccccccccccccccccccccccccccccccccc$
Poliomyelitis Polioencephalitis  Deaths of Infants   Total under 1 year   Illegitims	30	14 10		2 2	12 10	6 6 1 1	8 6	4 3	2 1 5	  2 1	4 10 1	2 6 3	4 24	<u></u>		<u> ⊢</u>	<u> </u>	<u> </u>			1 — — — — — — — — — — — — — — — — —	= =	 6 6 8	= =	— 1 — — 5 65 50
TOTAL BIRTHS	272	275 77			32 90			48 45	35 43 39	2 4214	5 149 8	3 70 85	102260	256 33	10 33 .1305 13				1 –	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		3	$\frac{1}{1} \dots - \frac{1}{1}$	194 10	1 4 5 3 960 922
Legitimate Illegitimate	262 10	261 75 14 2	48 3 5	2 36 8 1 5	81 84 1 6	45 42 3 1	70 63 2 4	43 43 5 2	34 41 29 1 2 5	3913	6 139 79 9 10	9 69 73 4 1 12	95251 7 9	245 31 11 2	32 . 1241 12 1 64	37 22 72 1		37 68 1 9	77105 6 7	100235 24 7 14	2 52 55	109 9	7146 143	116 9	3896 867 64 55
Population	2	7450	5254	3664	8449	4877	. 7180	4568	4847	4230	11200	8649 82	276 205							990 23200					98010



	AGGREGATE OF URBAN DISTRICTS.													Agg	REGATE (	of Rur	AL DIST.	RICTS.				
	Causes of Death.	Sex.	. All Ages.	0—	1—					45—	65	75	All Ages.	0—	1	2—	5—	15—	25	45	65—	75
	ALL CAUSES	M	871 778	131 81	29 26	26 28	24 26	48 37	89 86	212 175	177 161	135 158	629 597	65 50	17 18	13 14	14 8	30 17	43 54	141 134	166 125	140 177
1	Enterio Fever	M	1	= :::	= :::	= :::	= :::	<del>-</del>	= :::	= :::	= :::	=	1	= :::					= :::	= :::	= ::-	_
2	Smallpox	M	=	= :::								=		= :::					= :::	= :::	=	=
3	Measles	M	6	<u> </u>	1 1	3	= :::	= :::	= :::	= :::	= :::	1	::: = :::	= :::		= :::						Ξ
- 1	Scarlet Fever	M	3	= :::	= :::	<u>-</u>	= :::	<u> </u>	= :::	<u> </u>	= :::	=	2	= :::	1 —	1	= :::	= :::		= :::	= :::	=
5	Whooping Cough	M	14	12 8	1 4	1 3	= :::	= :::	= :::	_ :::	= :::	_	5 12									
6	Diphtheria	. M	+	= :::	= :::	1 —	3			= :::	= :::	_	4	= :::	=	1 —	3 1	= :::	<u> </u>	=	= :::	=
	Influenza												28 25	1	4	1	1	3	2	8	7	1
8	Encephalitis lethargica.	M	2	= ::::	= :::	= :::	<u> </u>	= :::		2	= :::	_	::: ī :::	= :::	= ::::	= :::	= :::	= :::	= :::	<u></u>	= :::	=
9	Meningococcal meningiti	s M F	3	= :::	= :::	3	= :::	= :::	= :::	= :::	= :::	=	::: = :::	= :::	<u> </u>	_ :::	= :::		= :::	= :::	= :::	Ξ
10	Tuberculosis of Respiratory System	. M	52 45	= :::		1 —	8	14 13	22 18	14 4	1 1	1	25 31	= :::		= :::	= :::	11 6	6 19		3	
2	Other Tuberculous Diseases												8 7	2 1		1 2	2	1 3		1 1	<u>1</u>	=
12	Cancer, Malignant Disease	. M F	81 74	= :::	= :::	= :::	= :::	1 —	4 4	36 42	26 20	14 8	58 60		= :::	= :::	_ :::	= :::	4 3	23 27	19 21	12 9
	Rheumatic Fever												1 3	= :::	= :::	= :::	ī :::	1	<u> </u>	<u> </u>	= :::	=
	Diabetes												7 4	= :::	= :::	= :::	= :::	= :::	= :::	3 2	1	3
15	Cerebral Hæmorrhage, &	F	73		<b>—</b>		—	—	1	21	32	19	36 53	= :::	= :::	_ :::	= :::	= :::	<del>-</del> 1	7 15	18 20	11 17
			106									18 18	100 94	= :::	= :::	= :::	<del>-</del>	1	4 2	30 26	43 28	22 36
17	Arterio-sclerosis	. M	30 7									4	33	= :::	= ::::	= :::	= :::	= :::		7	8 7	18 8
	Bronchitis	$\mathbf{F}$	65 47	16	4 1	3	= :::	<u>1</u>	2 3	10 3	18 14	$\frac{11}{22}$	35 41	9 6	2	1	= :::	= :::	<u>1</u>	2 9	12 7	10 17
19	Pneumonia (all forms).	M F	78 49	20	10 5	6 6	4 1	5 2	9 5	15 14	4 5	5 1	43 30									3 4
20	Other Respiratory Diseases	M	16	1 —	= :::		= :::	<u>1</u>	3	7	3	. 4	14 6	= :::	1	1	= :::	= :::	1	4 2	5 1	$\frac{2}{2}$
	Ulcer of Stomach or Duodenum		6		_ = :::	_ :::	1	1 —	2 1	3 2	= :::	1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$				<b>—</b>	—	1	2	2	1
	Diarrhœa, &c	F		. 5	3	2	2		1	1	1	1	6	2 —	1 —	1 —			<u>-</u> 2	<u> </u>	1	1
	Typhlitis	E	3				_ l	—	—		<u> </u>	_	5 2		= :::	<u>1</u>	3 1	<u> </u>	= :::	1 —	_ :::	_
-	Cirrhosis of Liver	F		· - ···				<b>—</b>		—	<u> </u>	,	3		<u> </u>	= :::	= :::	= :::		- :::	2 —	1
1.0	Acute and Chronic Nephritis	F	18	·		1		1	2	8 8			13			= :::			<u>1</u>	6 4	4 5	3
-	Puerperal Sepsis Other Accidents and			. –		_ = :::	<u> </u>		4		_ :::		4	= :::	<u> </u>		= :::	2	<u>2</u>	<u>= :::</u>	= :::	Ξ
	Diseases of Pregnancy and Parturition	F	12	. –		— —	—	2	9	 1		_	6	= :::		_ :::		<del>_</del>	<del>_</del>	= :::		=
28	Congenital Debility & Malformation, Premature Birth	M	47	. 46	<b>—</b>	—	1					_	27	27			—	—	<b>—</b>	<u> </u>		_
29	Suicide	M		. –			_	1	2	1	9	— —	20	—	<u> </u>					<u></u>	<u> </u>	
30	Other Deaths from Violence	<u>M</u> F		—	. —	—	—			·		_	3 25 10		<u> </u>	<u> </u>	<u> </u>	<u> —                                   </u>	<b>—</b>	_ 2	1 2	
3:	1 Other Defined Diseases	M	I 146 164	23	. 10	1	3	4	6	. 22	31	46	135	13	1	1	3			<b>—</b>	1	3
3:	2 Causes Ill-defined or Unknown		6	. 1				<del></del>	1	. 3	1	63	139	11	١	4	2	3	<u>4</u>	3	23	72
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